

Fig. 3

SEQ ID NO: 2

MDTSRLGVLL SLPVLLQLAT GGSSPRSGVL LRGCPHCHC EPDGRMLLRV
DCSDLGLSEL PSNLSVFYSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN
5 ALTYIPKGAF TGLYSLKVLN LQNNQLRHVP TEALQNLRSI QSLRLDANHI
SYVPPSCFSG LHSRLHLWLD DNALTEIPVQ AFRSLSALQA MTLALNKIHH
IPDYAFGNLS SLVVLHLHNN RIHSLGKKCF DGLHSLETLD LNNYNNLDEFP
TAIRTLNLK ELGFHSNNIR SIPEKAFVGN PSLITIHFYD NPIQFVGRSA
FQHLPELRTL TLNGASQITE FPDLTGTANL ESLTLTGAQI SSLPQTVCNQ
10 LPNLQVLDLS YNLLEDLPSF SVCQKLQKID LRHNEIYEIK VDTFQQLSL
RSLNLAWNKI AIIHPNAFST LPSLIKLDLS SNLLSSEFPIT GLHGLTHLKL
TGNHALQSLI SSENFPPELV IEMPYAYQCC AFGVCENAYK ISNQWNKGDN
SSMDDLHKKD AGMFQAQDER DLEDFLDDE EDLKALHSVQ CSPSPGPFKP
CEHLLDGWLI RIGVWTIAVL ALTCNALVTS TVFRSPYIS PIKLLIGVIA
15 AVNMLTGVSS AVLAGVDAFT FGSFARHGAW WENGVGCHVI GFLSIFASES
SVFLLTLAAL ERGFSVKYSA KFETKAPFSS LKVIILLCAL LALTMAAVPL
LGGSKYGASP LCLPLPFGEF STMGYMVALI LLNSLCFLMM TIAYTKLYCN
LDKGDLENIW DCSMVKHIAL LLFTNCILNC PVAFLSFSSL INLTFISPEV
IKFILLVVP LPACLNPLLY ILFNPHEKED LVSLRKQTYV WTRSKHPSLM
20 SINSDDVEKQ SCDSTQALVT FTSSSITYDL PPSSVPSPAY PVTESCHLSS
VAFVPCL

Fig. 4 (1/2)

5	LGR5 SEQ ID NO: 2	MTSRLGVLLSLPVLLQLATGGSSPRSGVLLRGCPHCHCEPDGRMLLRVDCSDLGLSELPSNLSVFTSYLDLSMNNISQ
	LGR6 SEQ ID NO: 3	-----MRLEGEGRSARAGQNLRSRAGSARRGAPR-----DLSMNNLTE
	LGR4 SEQ ID NO: 4	-----MPGFLGLLCFLALGGLLGSAGPSGAAPFLCAAPCSCDGDRR-----VDCSGKGLTAVPEGLSAFTQALDISMNNITQ
	Consensus/80%b.L.h.Gpts.tG.....sss.pps.sc.....DLSMNN1*p
10	LGR5	LLPNELPSLRFLLEELRLAGNALTYIPKGAFTGLYSLKVLMLQNNQLRHVPTEALQNLRSLSRLDANHSIVPPSCFSG
	LGR6	LQPGLFHHLRFLLEELRLSGNHLSHIPGQAFSGLYSLKTIIMLQNNQLGGIPAEALWELPSLQSL-----
	LGR4	LPEDAFKNFPFLLEELQLAGNDLSFIHPKALSGLKELKVLTLQNNQLKTVPSEAIRGLSALQSLRLDANHITSVPEDSFEG
	Consensus/80%	L..s.b.pb.FLEELpLtGN.L*aI...Ab*GLbpKLhLQNNQL.hlpSeAlb.L.tLQSL.....
15	LGR5	LHSLRHLWLDNLTETIPVQAFRSLSAIQAMTLALNKIHHPDYAFGNLSSLVVLHLHNNRIHSLGKKCFDGLHSLLETLD
	LGR6	-----D
	LGR4	LVQLRHLWLDNLSLTVFVHPFLSNLPTLQALTLALNKISSIPDFAFTNLSSLVVLHLHNNKIRSLSQHCFDGLDNLETLD
	Consensus/80%D
20	LGR5	LNYNLDEFFTAIRTLNLKELGFGHSNNIRSIPEKAFVGNPSLITIHFDNPIQFVGRSAFQHLPELRLTLNGASQITE
	LGR6	LNYNKLQEFFVAIRTLGRQLQELGFHNNIKAIPEKAFMGNPLLQTIHFYDNPIQFVGRSAFYQLPKLHTLSLNGAMDIQE
	LGR4	LNYNLGEFFQAIKALPSLKELGFGHSNISIVIPDGAFDGNPLLRTHLYDNPLSFVGNSAFHNLSLHSLVIRGASMVQQ
	Consensus/80%	LNYNpL.EFF.AI+sLspLpELGFHsNsIpsIP..AF.GNP.LbTIHbYDNPlpFVGpSAFp.LscL+*LslpGA..lpp
25	LGR5	FPPDLTGANLESLLTGAQISSLPQTVCNQLPNLQVLDLSYNLLEDLPSFVSVCQKLQKIDLRHNEIYEIKVDTFQQLLSL
	LGR6	FPPDLKGTTSLEILTLAGIRLLPSGMCQQLPRLRVLELSHNQIEELPSLHRCQKLEETIGLQHNRIWEIGADTFQQLSSL
	LGR4	FPNLTGTVHLESLLTGTKISSIPNNLCQEQKMLRTLDLSYNNIRDLPFNGCHALEEISLQRNQIYQIKESTFQGLISL
	Consensus/80%	FPsLpGtspLE.LTLT.s.Ip..lPphCpbb..LpsL-LSaN.lc-LPSbp.Cp.LpcIsLp+NpIapI..sTfP.L.SL
30	LGR5	RSINLAWNKIAIHPNAFSTLPSLIKLDLSSNLLSSFPITGLHGLTHLKLTKGNHALQSLISSENFPELKVIEPFIYAYQCC
	LGR6	QALDLSWNAIRSIHPEAFSTLHSLVKLDLTDNQLTTPLAGLGGIMHLKLKGNLALSQAFSKDSFPKLRILEVFIYAYQCC
	LGR4	RILDLRSNLIHEIHSRAEATLGPITNLDSVFNELTSFPTEGLNGLNQLKLVGNFKLKEALAAKDFVNLRSLSVPFIYAYQCC
	Consensus/80%	p.LsLtbN.I..IHspAftTL.sIhpLD1*.NbL**bPh.GL.GL.pLKL.GNb.Lpphbt.csFspL+.lphPIYAYQCC
35	LGR5	AFGVCENAYKISNQWNKGDNS SMDD-LHKKDAGMFQAQDE-----RDLEDFLDDEEDLKALHSVQCSPSPGPFKPCHELL
	LGR6	PYGMCAFFKASGQWEAEDLHLDDESSKRPLGLLARQAENHYDQDLDELQLEMEDS-KPHPSVQCSETPGPFKPCLEYLF
	LGR4	AFWGCDSYANLN-----TEDNSLQDHSVAQEKGKCMSTADA-----ANVTSTLENEHSQIIHCTPSTGAFKPCLEYLL
	Consensus/80%	sahhC.shhphs.....D.p..Dc...pc.h.hb...s.....ph..pbEpp.+sb..lpC*P*sGsFKFCEaLb
40	LGR5	DGWLIRIGVWTIAVLALTCNALVTSTVER-SPLYISPIKLLIGVIAAVNMLTGVSSAVLAGVDAFTFGSFARHGAWWENG
	LGR6	ESWGIRLAVWAIVLLSVLCNGLVLLTVFAGGVPVLPVPVKFVVGAIAGANTLTGISCGLLASVDALTFGQFSEYGARWETG
	LGR4	GSWMIRLTWVFIFLVALFENLLVILTTFE-SCTSLPSSKLFIGLISVSNLFMGITYTGILTFLDVAVSWGRFAEFGIWWETG
	Consensus/80%	.tWhIRIsVWhIhlltIhhNhLvh.TsF..tsh.lss.KbhIGhItssNhbhGl.stlIs.lDah*aGpFtcaGhbWESG

continued as Fig. 4 (2/2)

U.S. Serial No. 10/587,159
Art Unit: Not Yet Assigned
Replacement Sheet

Fig. 4 (2/2)

continued from Fig. 4 (1/2)

5
LGR5 VGCHVIGFLSIFASESSVFLTLAALERGFSVKYSAKFETKAPFSSLKVIILLCALLALTMAAVELLGGSKYGASFLCLP
LGR6 LGCRATGFLAVLGSEASVLLTLAAVQCSVSVSCVRAYGKSPSLGSVRAGVLGCLALAGLAAALPLASVGEYGASFLCLP
LGR4 SGCKVAGFLAVFSESAIFLLMLATVERSLAKDIMKNGKSNHLKQFRVAALLAFLGATVAGCFPLFHRGEYSASFLCLP
Consensus/80% .GC+shGFLt1btSEtt1bLLhLAslppthSep.....pps.b.ph+shhLhshhhAhhhtshPLh..toYtASFLCLP
10
LGR5 --LPFGEPSTMGYMVALILLNSLCFLMMTIAYTKLYCNLDKGDLENIWDCSMVKHIALLLFTNCILNCPVAFLSFSSLIN
LGR6 YAPPEGQPAALGFTVALVMMNSFCFLVAGAYIKLYCDLPRGDFEAVWDCAMVRHVAVLI FADGLLYCFVAFLSFASMLG
LGR4 --FPTGETPSLGFTVTLVLLNSLAFLIMAVIYTKLYCNLEKEDLSENSQSSMIKHVAVLI FTFNCIFFCPVAFFSFAPLIT
Consensus/80% ...P.Gpss sbGahVsLlbbNSbsFLhshhhYhKLYCsL.+ .Dbp...patML+HlAbLlFssslb.CPVAfbsFtsbls
15
LGR5 LTFISPEVIKFI LLVVVFLPACLNFLLYILFNPHEKEDLVSLRKQTYVWTRSKHPSLMSINSDDVEKQSCDS-----TQ
LGR6 LFPVTPEAVKSVLLVVLPLPACLNFLLYLLFNPFRDDLRLRPR-----AGDSGPLAYAAAGELEKSSCDs-----TQ
LGR4 AISISPEIMKSVTLIFFFLPACLNFLVLYVFFNPKFKEDWKLLKRRVTKKSGSVSVSISSQGGCLEQDFYDCGMYSHLQG
Consensus/80% hh.1*PEhhK.lhLlhhPLPACLNFLLYlbfNPF+ F+-Db..L+.p.....t.pssl...sts..pc..hDs.....p.
20
LGR5 ALVTFSSSITYDLPPS-----SVSPAPYFVTESCHLS-----
LGR6 ALVAFSDVDLILEASEAGRPPGLETYGFSVT LISQPGAPRLEGSHCPEEGNHFGNPQPSMDGELLRLRAEGSTPAGG
LGR4 NLTVCDCCESTLLTKFVSCKHLIKSHSCPALAVASCQRPEGYWSDCCTQSAHSYADEEDSEFVSDSSDQVQACGRACFYQ
Consensus/80% sLsshssp.hb.h..s.....Ss.pF.h...-ssp.s.....
25
LGR5 -----SVAFPVCL
LGR6 GLSGGGGFQPSGLAFASHV
LGR4 SRGFPLVRYAYNLPRVKD-
Consensus/80%slsbs.p.
30